

## **DETAILED ACTION**

### **Examiner's Comment**

#### ***Status of Claims***

1. The amendment filed on 4 September 2009 has been entered into the record and has been fully considered. Claims 1 and 2 are amended.
2. Claims 1 and 2 directed to a method for identifying an agent which modulates the binding of an RGM (repulsive guidance molecule) to a Neogenin, comprising detecting and monitoring the binding, are under consideration in the instant application.
3. It is noted that claims 18 and 19 of a later filed application, 11/992720, may potentially be rejected under non-statutory double patenting over claims of the instant application.
4. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to the applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it **MUST** be submitted no later than the payment of the issue fee.
5. Authorization for this examiner's amendment was given following a telephone interview with Lisa V. Mueller, on 18 December 2009.

**The application has been amended as follows:**

6. Please update the following claims to read as follows (portions that are struck through indicate deletions, and portions that are underlined indicate insertion as per the current amendment):

**Specification**

Please amend the typo in the description of Figure 1C on page 10 (please refer to the amendment dated 9/4/09).

Saturation of RGM-AP to COS-7 expressing Neogenin. Bound RGM-AP activity was determined for each of the indicated concentrations of RGM-AP. The data are the average  $\pm$ sem of 6 independent determinations.

**Drawings**

Figure 1D has a typo for the Y-axis label. Please correct the label as follows:

BOUNDD/FREE

**Claims**

**Claim 1 (Currently amended)** A method for identifying an agent which modulates the binding of a Repulsive Guidance Molecule (RGM) to a Neogenin, the method comprising the steps of: (a) forming a mixture comprising an isolated mammalian RGM and an isolated mammalian Neogenin, wherein the isolated mammalian Neogenin has ~~an~~ the amino

acid sequence of SEQ ID NO: 1 ~~or amino acids 1-1027 of chick Neogenin~~;  
(b) incubating said mixture in the presence of an agent; and (c) detecting  
in the incubated mixture of step (b) the level of specific binding between  
said RGM and said Neogenin, wherein a difference in the detected level of  
specific binding of said RGM to said Neogenin in the presence of said  
agent relative to the level of specific binding in the absence of said agent  
indicates that said agent modulates the binding of said RGM to said  
Neogenin, wherein said RGM is RGM A or RGM B.

**Claim 2 (Currently amended)** A method for monitoring the binding of a  
Repulsive Guidance Molecule (RGM), wherein said RGM is RGM A or  
RGM B to a Neogenin, the method comprising the steps of: (a) contacting  
a first protein comprising said RGM tagged with a visible stain or  
enzymatic signal, with a second protein which comprises the Neogenin,  
wherein said Neogenin has ~~an~~ the amino acid sequence of SEQ ID NO: 1  
~~or amino acids 1-1027 of chick Neogenin~~ and with a RGM A-specific  
antibody, or a RGM B specific antibody ~~or small molecule~~ which will  
interfere in the binding between the tagged RGM A or RGM B and the  
Neogenin; (b) leaving the mixture for a time and under conditions where a  
domain of the RGM A or RGM B binds to a domain of the Neogenin; and  
(c) monitoring the binding of the first protein which comprises the tagged  
RGM, to the second protein which comprises the Neogenin, wherein a  
reduction in the visible stain or enzymatic signal indicates a reduction of  
tagged RGM binding to Neogenin due to the antibody ~~or small molecule~~  
interacting with said binding, ~~wherein said RGM is RGM A or RGM B.~~

***Advisory information***

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Aditi Dutt whose telephone number is (571) 272-9037. The examiner can normally be reached on Monday through Friday, 9:00 a.m. to 5:00 p.m.
8. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jeffrey Stucker, can be reached on (571) 272-0911. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.
9. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov/>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

AD

18 December 2009

/Jeffrey Stucker/

Supervisory Patent Examiner, Art Unit 1649